

Existing Conditions

(Refer to EXISTING CONDITION – VPDES FLOW PATHS drawing)

Ash Pond E (Outfall 005)

Ash Pond E accepts stormwater runoff, Metals Cleaning Waste Treatment Facility effluent (internal Outfall 501) by an open channel, decant from Pond D, and Oil Waste Treatment Basin effluent (internal Outfall 502) via a pumped forcemain. It discharges via a riser structure to permitted Outfall 005, which discharges to Quantico Creek.

- **Ash Pond D**

Ash Pond D contains a permanent pool of water (primarily stormwater from the surrounding drainage area) that is maintained at approximately 35-ft below the top of the dam. Ash Pond D is presently not accepting any process flows. The outfall is configured to discharge to Ash Pond E.

- **Metals Cleaning Waste Treatment Facility (Outfall 501)**

The Metals Cleaning Waste Treatment Facility consists of two (2) lined ponds. The ponds are used for batch treatment of boiler, preheater, and piping cleaning waters, among others. After treatment, the Metals Cleaning Waste Treatment Facility effluent is discharged to Pond E. Sludge is pumped out of the Metal Cleaning Waste Treatment Facility every 2 or 3 years (where is the MCWTF sludge taken for disposal?).

- **Oil Waste Treatment Basin (Outfall 502)**

The Oil Waste Treatment Basin accepts boiler blowdown, floor drains, cooling tower drift, stormwater, among other process waters. The treated effluent is pumped to Pond E. Treated oil waste is permitted to be directed to the Low Volume Settling Ponds on a temporary basis to Outfall 004.

Ponds ABC (Outfall S104)

Ponds ABC presently receive surface runoff from approximately 44 acres of the plant site that are not associated with active industrial activity. The natural flow of the storm water upon entering the ponds is toward a decant structure located in Pond C. During wetter periods of the year storm water may pond behind the decant structure and, if sufficient storm water accumulates, may enter the decant structure and discharge to Quantico Creek through Outfall S104.

Low Volume Waste Settling Basin (Outfall 004)

The Low Volume Waste Settling Basin current receives low volume wastewaters including Unit 5 cooling tower drift, yard drains, floor drains, Unit 5 circulating water, Units 1-4 sand filter backwash, filter purge, Unit 6 wash water, electrodialysis reversal (EDR) backwash, neutralization sump, and stormwater. Treated wastewaters are discharged through Outfall 004

Phase 1: Dredge and Close Ash Pond E Preliminary Pond ABC and D Dewatering and Grading

(Refer to PHASE 1 - DEWATER, DREDGE, CLEAR, GRADE, & CLOSE POND E AND PRELIMINARY DEWATER, GRADE PONDS D & ABC drawing)

Phase I of the project will include the following activities:

- Dredging of solids from Pond E to Pond D
- Dewatering of Pond E
- Grading of material in Pond D
- Construction of temporary sediment basins associated with Ponds A, B, C and with Pond E
- Installation of temporary portable treatment system associated with sediment basin located within Pond E footprint
- Rerouting of Oil Waste Treatment Basin to Low Volume Settling Pond

Phase I activities will affect existing wastewater discharges as follows:

Outfall 005

Solid materials from Pond E will be mechanically dredged and deposited in Pond D during the initial stages of Phase I construction. During this time, overflow/decant water from Pond D will be directed back to Pond E for treatment. After dredging activities have been completed, a temporary treatment system will be constructed at Pond E to ensure that discharges from Outfall 005 are in compliance with permit requirements. Dewatering wastewater from Pond E will be directed through this treatment system prior to discharge via Outfall 005.

Following the construction of a temporary sediment pond associated with the A,B,C pond area (see Outfall S104 below), contact stormwater from this pond will be pumped to the treatment system at Pond E prior to discharge via 005.

Outfall S104

Prior to the commencement of construction activities at the A,B,C Pond Area, temporary sedimentation basins will be constructed to collect contact stormwater. Water collected in the sedimentation basins will be pumped to the temporary treatment system at Pond E for discharge via 005. There will be no discharge of contact stormwater from S104.

Metals Cleaning Waste Treatment Facility (Outfall 501)

Metals cleaning wastes collected in the metals cleaning waste treatment facility during Phase I construction will be conveyed through the temporary treatment system and additional polishing prior to discharge via Outfall 005.

Possum Point PS CCB Pond Closures
Sequencing Narrative for Construction Phases
April 7, 2015 Station Meeting

Outfall 004

Beginning in the Phase I construction period, the discharge from the Oily Waste Treatment Basin will be diverted to the station's existing low volume settling ponds for discharge via Outfall 004. This diversion will continue until the post construction phase when the final discharge configuration is established.

Oil Waste Treatment Basin (Outfall 502)

Discharges from the Oil Waste Treatment Basin will be rerouted to the existing Low Volume Settling Ponds where the combined wastewater will be discharged via permitted Outfall 004. WILL THE EXISTING PONDS REQUIRE DREDGING PRIOR TO INTRODUCTION OF THE OIL WASTE TREATMENT BASIN WASTEWATER?

DRAFT

ActivityID	Activity Name	Original Duration	Remaining Duration	Percent Complete	Start	Finish	Predecessors	Gantt Chart																													
								2015				2016				2017				2018				2019				2020				2021				2022	
								Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2					
Possum Point Outlet Schedule		1366	1352		24-Mar-15 A	18-Dec-18																															
Outfall 005 (Pond E Outlet)		974	964		24-Mar-15 A	18-Dec-18																															
A1000	Drain Majority of Pond E	15	15	25%	24-Mar-15 A	27-Apr-15																															
A1005	Pump Pond E to Pond D	32	32	0%	07-Apr-15	20-May-15	A1000																														
A1010	Set Up Temporary Treatment System for Construction Phase 1	16	16	0%	21-May-15	12-Jun-15	A1005																														
A1015	Phase 1 of Construction - Temporary Treatment System	312	312	0%	15-Jun-15	24-Aug-16	A1010																														
A1020	Construct Polishing Forebay and Wetland in Pond E	212	212	0%	10-Nov-15*	31-Aug-16																															
A1025	Phase 2 of Construction - Temporary Treatment System	152	152	0%	01-Sep-16	31-Mar-17	A1020																														
A1030	Phase 3 of Construction - Temporary Treatment System	141	141	0%	03-Apr-17	16-Oct-17	A1025																														
A1035	Interim Post Construction Construction	261	261	0%	17-Oct-17	16-Oct-18	A1030																														
A1040	Post Construction Condition	45	45	0%	17-Oct-18	18-Dec-18	A1035																														
Outfall S104 (Pond ABC Outlet)		1276	1276		22-Jun-15	18-Dec-18																															
A1055	Construct Temporary Lined Sediment Pond	11	11	0%	07-Mar-16*	21-Mar-16																															
A1060	Construct Pump System to Pump Flows from Lined Basin to Temporary Treatment System	11	11	0%	07-Mar-16*	21-Mar-16																															
A1065	Phase 1 of Construction - Temporary Treatment System (No Contact Water Discharge from S104)	312	312	0%	22-Jun-15*	31-Aug-16																															
A1070	Phase 2 of Construction - Temporary Treatment System (No Contact Water Discharge from S104)	152	152	0%	01-Sep-16	31-Mar-17	A1065																														
A1072	Remove Liner from ABC Contact Water Basin and Convert Basin to Temporary E&S pond	17	17	0%	15-Mar-17*	31-Mar-17																															
A1075	Phase 3 of Construction - Temporary Treatment System (No Contact Water Discharge from S104)	141	141	0%	03-Apr-17	16-Oct-17	A1072																														
A1080	Interim Post Construction Construction (No Contact Water Discharge from S104)	261	261	0%	17-Oct-17	16-Oct-18	A1075																														
A1085	Post Construction Condition (No Contact Water Discharge from S104)	45	45	0%	17-Oct-18	18-Dec-18	A1080																														
Outfall 004 (Low Volume Settling Ponds Outfall)		936	936		15-May-15	18-Dec-18																															
A1110	Phase 1 Through Post Construction - Divert Oily Waste Stream to Low Volume Settling Ponds	911	911	0%	22-Jun-15*	18-Dec-18																															
A1115	Temporary Oily Waste Diversion to Low Volume Settling Ponds	360	360	0%	15-May-15*	03-Oct-16																															
A1120	Install Permanent Oily Waste Pipeline to Low Volume Settling Ponds	196	196	0%	04-Jan-16*	03-Oct-16																															

Actual Work

Critical Remaining Work


Remaining Work

◆ Milestone

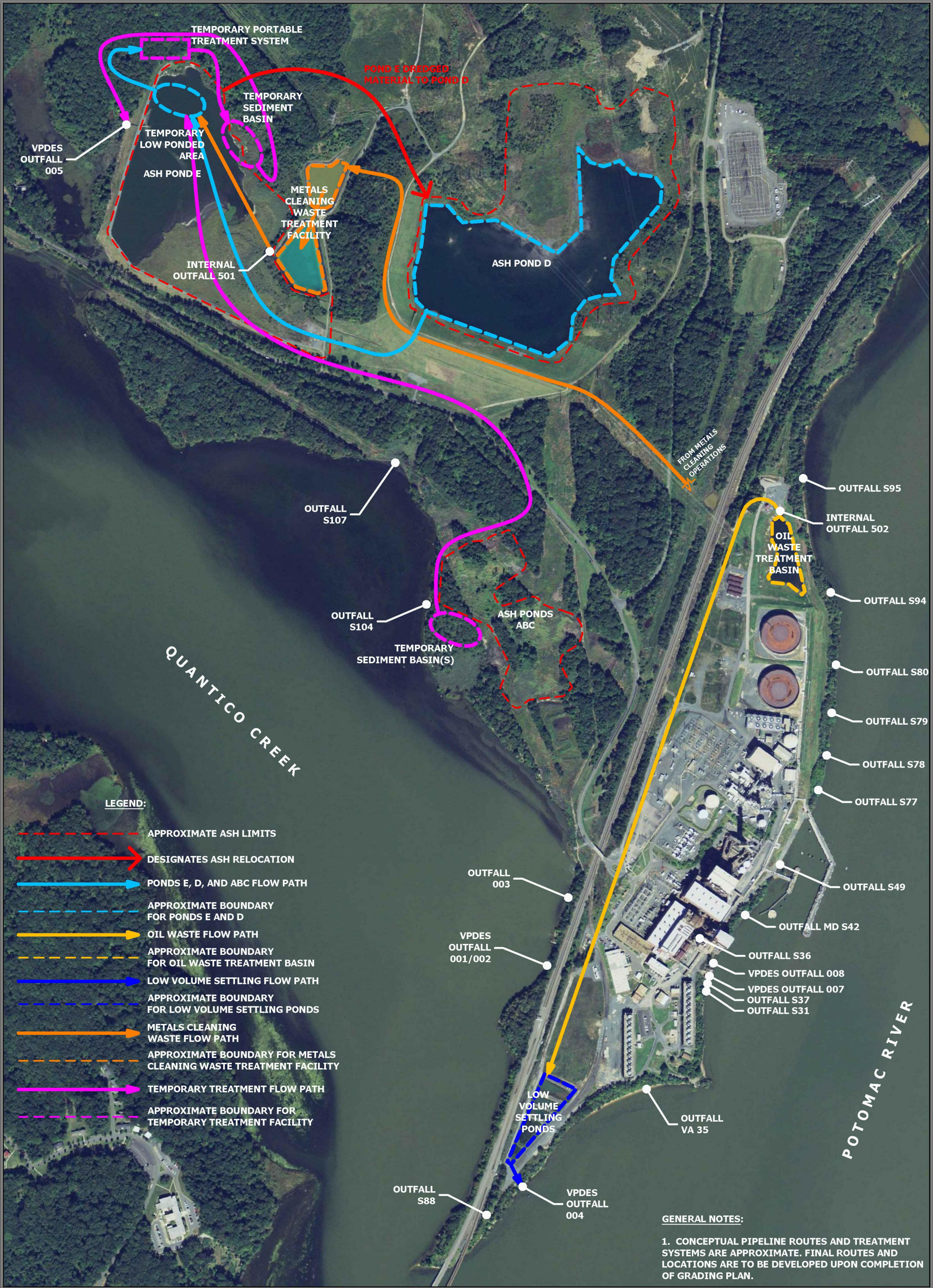





GAI CAD FILE PATH: Z:\Energy\2015\C150132.00 - DOM - Possum Point PS CCB\Working Docs\Task 1.3\C150132.00 - VPDES - EXISTING.dwg

DRAWING TITLE			DRAWN BY:	CHECKED BY:	APPROVED BY:
EXISTING CONDITION - VPDES FLOW PATHS			DEBARJD	MONNEJD	QUINLSC
PROJECT		CLIENT	DWG TYPE:	SCALE:	ISSUE DATE:
POSSUM POINT POWER STATION 19000 POSSUM POINT ROAD DUMFRIES, PRINCE WILLIAM COUNTY VIRGINIA 22026		DOMINION RESOURCES SERVICE, INC. 5000 DOMINION BOULEVARD GLEN ALLEN, VIRGINIA 23060		1" = 600'	04/02/2015
			SHEET NO.:	1 OF 1	
			GAI FILE NUMBER:		
			C150132.00 - VPDES - EXISTING		
			GAI DRAWING NUMBER:		
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DRAWING TITLE			DRAWN BY:	CHECKED BY:	APPROVED BY:
PHASE 1 - DEWATER, DREDGE, CLEAR, GRADE, & CLOSE POND E AND PRELIMINARY DEWATER, GRADE PONDS D & ABC			DEBARJD	MONNEJD	QUINLSC
PROJECT			CLIENT		
POSSUM POINT POWER STATION 19000 POSSUM POINT ROAD DUMFRIES, PRINCE WILLIAM COUNTY VIRGINIA 22026			DOMINION RESOURCES SERVICE, INC. 5000 DOMINION BOULEVARD GLEN ALLEN, VIRGINIA 23060		
DWG TYPE:			SCALE:	ISSUE DATE:	
			1" = 600'	04/02/2015	
SHEET NO.:			1 OF 1		
GAI FILE NUMBER:			C150132.00 - VPDES - PHASE 1		
GAI DRAWING NUMBER:					
12x18 Dredge & Close E					
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